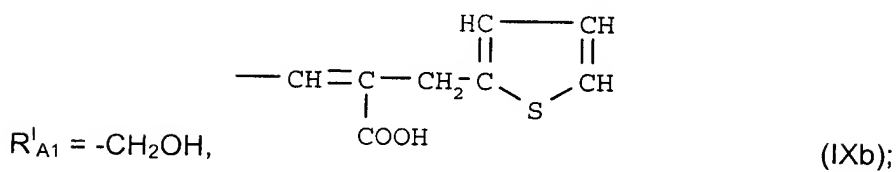
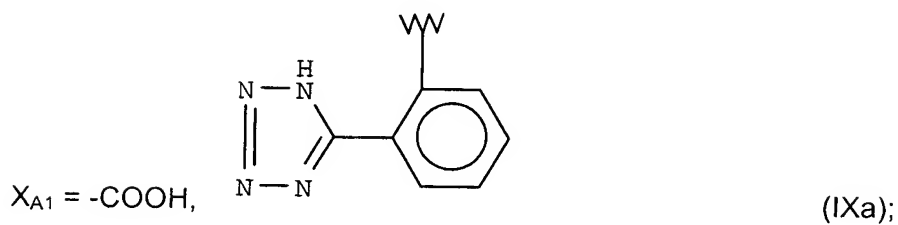
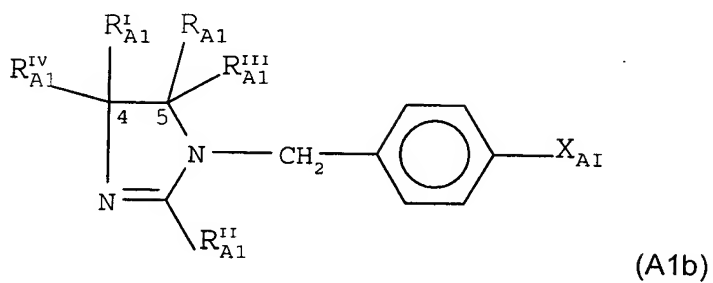


What is claimed:

1. Nitrate salts of the compounds selected from the following classes:

Class (A1b) of formula (A1b):



$R_{A1}^I = H, Cl;$

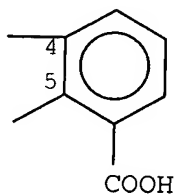
$R_{A1}^{II} = -(CH_2)_3-CH_3, -O-CH_2-CH_3;$

$R_{A1}^{III} = H, \text{ free valence};$

$R_{A1}^{IV} = \text{free valence};$

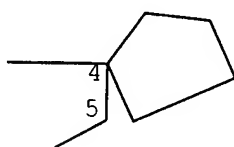
or  $R_{A1} = -O$  and  $R_{A1}^{III} = \text{free valence form with the carbon atom in 5 position}$   
a keto group,

or  $R_{A1}^{IV}$ ,  $R_{A1}^{III}$ ,  $R_{A1}^I$  and the carbon atoms in 4 and 5 position of the heterocyclic ring of the formula (A1b) form group (IXc),



(IXc);

or  $R_{A1}^I$ ,  $R_{A1}^{IV}$  and the carbon atom in 4 position of the heterocyclic ring of the formula (A1b) form group (IXd);



(IXd);

and wherein  $R_{A1}^{III}$  = free valence and  $R_{A1}^{IV}$  = free valence there is a double bond between the carbon atoms in 4 and 5 position in the heterocyclic ring of the formula (A1b),

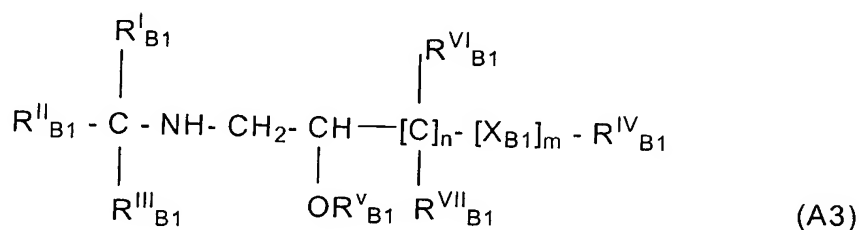
when  $X_{A1}$  = (Ixa),  $R_{A1}$  =  $\text{CH}_2\text{OH}$ ,  $R_{A1}^I$  = Cl,  $R_{A1}^{III}$  =  $R_{A1}^{IV}$  = free valences forming a  $-\text{CH}=\text{CH}-$  double bond with the carbon atoms in 4 to 5 position of the heterocyclic ring of the formula (A1b),  $R_{A1}^{II}$  =  $-(\text{CH}_2)_3\text{-CH}_3$ , Losartan residue;

as in Losartan but with  $R_{A1}$  = -O and  $R_{A1}^{III}$  free valence, so as to form in combination with the carbon atom in 5 position of the heterocyclic ring of the formula (A1b) a ketonic group,  $R_{A1}^I$  with  $R_{A1}^{IV}$  and with the carbon atom in 4 position of the heterocyclic ring are such as to form the saturated ring having 5 carbon atoms (IXd), Irbesartan residue;

as in Losartan but with  $R_{A1}^{II} = -O-CH_2-CH_3$ ,  $R_{A1}$  together with  $R_{A1}^I$  and the carbon atoms in 4 and 5 position of the heterocyclic ring with  $R_{A1}^{IV}$  and  $R_{A1}^{III}$  free valences, are such as to form the aromatic radical containing a  $-COOH$  group (IXc) Candesartan residue;

as in Losartan but with  $X_{A1} = -COOH$ ,  $R_{A1} = (IXb)$ ,  $R_{A1}^I = H$ , and  $R_{A1}^{IV}$  and  $R_{A1}^{III}$  free valence from a double bond between the carbon atoms in 4 and 5 position in the heterocyclic ring of formula (A1b), Eprosartan;  
class (A1c): Valsartan.

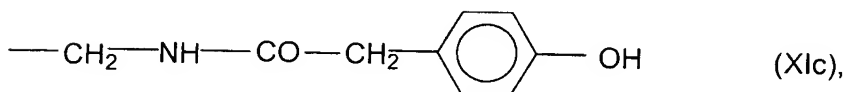
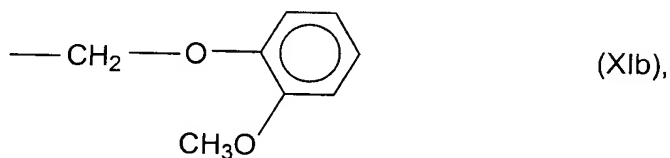
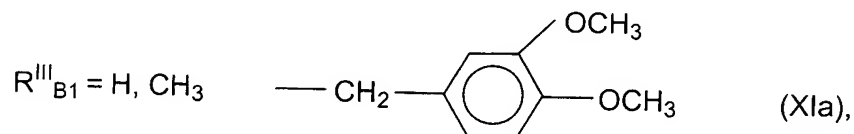
2. Nitrate salts of compounds selected from the following class (A3) of formula (A3):

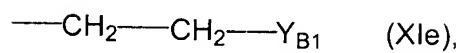
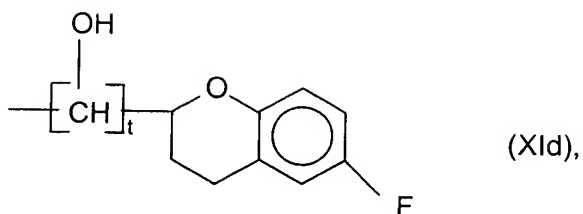


$R_{B1}^{VI} = H$ ;

$R_{B1}^{VII} = H$ ;

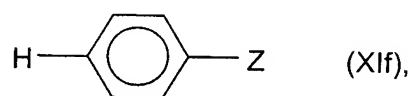
$R_{B1}^I$  and  $R_{B1}^{II}$ , equal to or different from each other, are H,  $CH_3$ ,





wherein in the formula (XId)  $t = 0, 1$ ;

in the formula (Xle)  $\text{Y}_{B1}$  can have the following meanings:

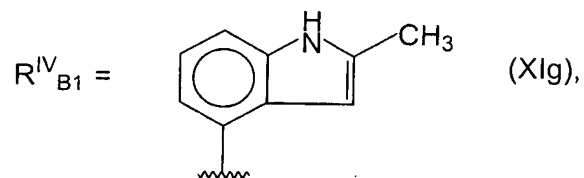
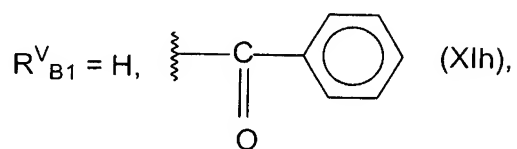


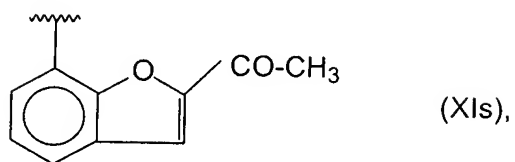
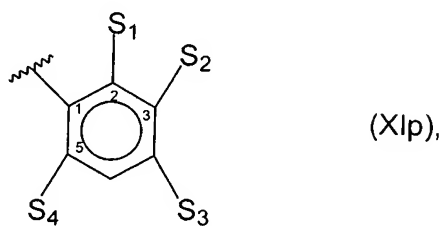
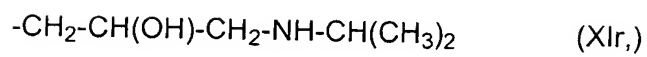
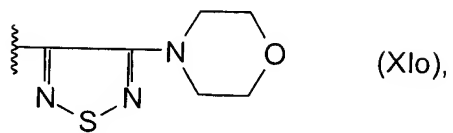
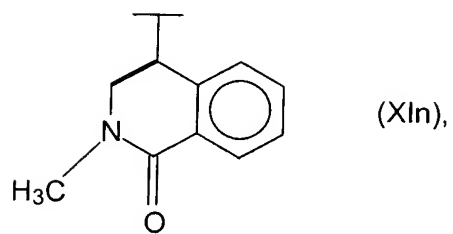
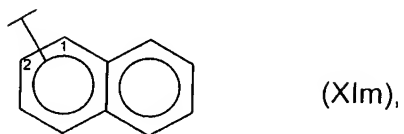
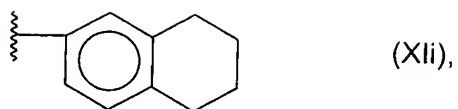
in the formula (XIf)  $Z = \text{H}, -\text{OCH}_3$ ;

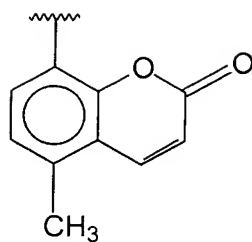
in the formula (A3);

$\text{X}_{B1} = -\text{O}-, -\text{S}-$ ;

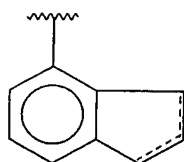
$n$  and  $m$ , equal to or different from each other, are 0, 1;



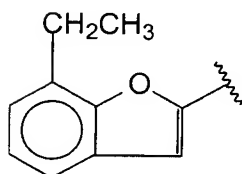




(XIIt),



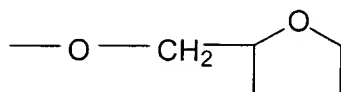
(XIU),



(XIz),

wherein in the formula (XI<sub>p</sub>):

S<sub>1</sub> = H, CN, OCH<sub>3</sub>, CH<sub>3</sub>, -CH<sub>2</sub>-CH<sub>3</sub>-, -O-CH<sub>2</sub>-CONH-CH<sub>3</sub>, -COCH<sub>3</sub>, -CO-(CH<sub>2</sub>)<sub>2</sub>-CH<sub>3</sub>, -O-CH<sub>2</sub>-CH = CH<sub>2</sub>, -CH<sub>2</sub>-CH = CH<sub>2</sub>, cyclopentyl, or



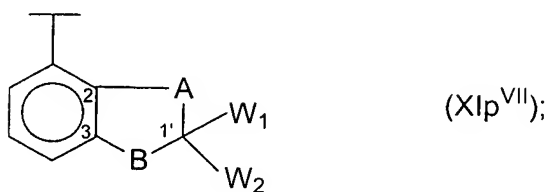
(XI<sub>p</sub><sup>II</sup>);

S<sub>2</sub> = H, CH<sub>3</sub>, Cl, -SOCH<sub>3</sub>, -CONH<sub>2</sub>;

S<sub>3</sub> = H, F, Cl, OH, NO<sub>2</sub>, -CH<sub>2</sub>-CO-NH<sub>2</sub>, -(CH<sub>2</sub>)<sub>2</sub>-OCH<sub>3</sub>, -NH-COCH<sub>3</sub>, -CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH(CH<sub>3</sub>)<sub>2</sub>, -CH<sub>2</sub>-CH<sub>2</sub>-COOCH<sub>3</sub>, -NH-CO-N(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>, -NH-CO-(CH<sub>2</sub>)<sub>2</sub>-CH<sub>3</sub>, -NH-SO<sub>2</sub>-CH<sub>3</sub>, -NH-CO-NH-[cyclohexyl], -CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-[cyclopropyl];

S<sub>4</sub> = H, Cl, -CH<sub>2</sub>-CH<sub>2</sub>-;

or S<sub>1</sub>, S<sub>2</sub> and the carbon atoms in 2 and 3 position of the C<sub>6</sub> aromatic ring of the radical (XIp) form the following ring:



wherein:

(<sup>•</sup>) designates the atom adjacent to the aromatic ring of the formula XIp<sup>VII</sup>

B = -CH<sub>2</sub>-, -NH-, -CH=CH-, (<sup>•</sup>)-CO-CH<sub>2</sub>-;

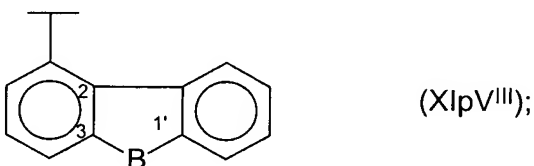
A = -O-, (<sup>•</sup>)-CH<sub>2</sub>-CH(OH)-, (<sup>•</sup>)-O-CH<sub>2</sub>-, (<sup>•</sup>)-S-CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>-,

W<sub>1</sub> = H, free valence;

W<sub>2</sub> = free valence, H, OH, -CH<sub>3</sub>, -ONO<sub>2</sub>, -O;

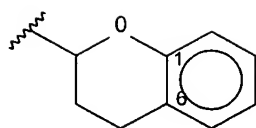
or A is a tertiary carbon atom and at the same time W<sub>1</sub> = free valence to form a double bond -CH=CH- between A and the carbon atom in 1' position,

or W<sub>1</sub>, W<sub>2</sub> the carbon atom in 1' position and A form an aromatic ring having 6 carbon atoms to form the following group:



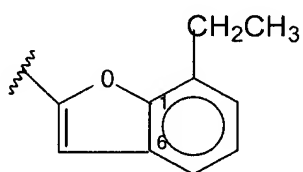
when W<sub>2</sub> = -O and W<sub>1</sub> = free valence at the carbon atom in 1' position of radical (XIp<sup>VII</sup>) it is formed a ketonic group;

or when in formula (XIp) S<sub>4</sub> = -CH<sub>2</sub>-CH<sub>2</sub>-, and in formula (A3) X<sub>B1</sub> is oxygen, m = n = 1 and (R<sup>VII</sup><sub>B1</sub>) is a free valence, the following ring is formed with the carbon atoms in 1 and 6 position of the aromatic ring of radical (XIp):



(XIp<sup>V</sup>),

or when in formula (A3)  $n = m = 1$ , both  $R^{VII}_{B1}$  and  $R^{VI}_{B1}$  are free valences,  $S_4$  and the carbon atoms in 1 and 6 position of the aromatic ring of formula (XIp),  $S_1$  being  $-CH_2-CH_3$ , together with the carbon atom  $-C|_n-$  and  $X_{B1}$  = oxygen of formula (A3) form the following ring:



(XIp<sup>VI</sup>),

when  $R^I_{B1} = H$ ,  $R^{II}_{B1}$  and  $R^{III}_{B1} = CH_3$ ,  $R^V_{B1} = H$ ,  $R^{VI}_{B1} = R^{VII}_{B1} = H$ ,  $m = n = 1$ ,  $X_{B1} = -O-$ ,  $R^{IV}_{B1} = (XIp)$  wherein  $S_1 = S_2 = S_4 = H$ ,  $S_3 = -CH_2-CO-NH_2$ , Atenolol residue;

as in Atenolol but with  $R^{IV}_{B1} = (XIs)$ , Befunolol residue;

as in Atenolol, but with  $S_1 = S_2 = S_4 = H$ ,  $S_1 = -CH_2-CH=CH_2$ , Alprenolol residue;

as in Atenolol, but with  $S_1 = COCH_3$ ,  $S_3 = -NH-CO-(CH_2)_2-CH_3$ ,  $S_2 = S_4 = H$ , Acebutolol residue;

as in Atenolol, but with  $S_3 = -CH_2-CH_2-O-CH_2-$  (cyclopropyl), Betaxolol residue;

as in Atenolol but with  $S_3 = -CH_2-O-CH_2-CH_2-O-CH(CH_3)_2$ , Bisoprolol residue

as in Alprenolol but with  $S_1 = (XIp^{II})$  and  $R^I_{B1} = CH^3$ , Bufetolol residue;

as in Bufetolol, but with  $S_1 = -CN$ , Bunitrolol residue;

as in Bufetolol, but with  $S_1 = H$ ,  $S_4 = Cl$ ,  $S_2 = CH_3$ , Bupranolol residue;

as in Bufetolol but with  $S_1 = -\text{CO}-(\text{CH}_2)_2-\text{CH}_3$ ,  $S_3 = \text{F}$ , Butofilolol residue;

as in Mepindolol but in  $\text{R}_{\text{B}1}^{\text{IV}} = (\text{XIp}^{\text{VII}})$   $\text{A} = -\text{O}-\text{CH}_2-$ ,  $\text{B} = -\text{CH}_2-$ ,  $\text{W}_2 = -\text{ONO}_2$ ,  $\text{W}_1 = \text{H}$ , Nipradilol residue;

as in Alprenolol, but with  $S_1 = -\text{O}-\text{CH}_2-\text{CH} = \text{CH}_2$ , Oxprenolol residue;

as in Bufetolol, but with  $S_1 = \text{cyclopentyl}$ , Penbutolol residue;

as in Mepindolol but with  $\text{W}_2 = \text{H}$ , Pindolol residue;

as in Atenolol but with  $S_3 = -\text{NH}-\text{COCH}_3$ , Practolol residue;

as in Bufetolol but with  $S_1 = \text{H}$ ,  $S_3 = -\text{NH}-\text{CO}-\text{NH}-(\text{cyclohexyl})$ , Talinolol residue;

as in Nipradilol but with  $\text{R}_{\text{B}1}^{\text{I}} = \text{CH}_3$ ,  $\text{A} = -\text{S}-\text{CH}_2-$  and  $\text{W}_2 = \text{H}$ , Tertatolol residue;

as in Tertatolol but with  $\text{R}_{\text{B}1}^{\text{IV}} = (\text{XIn})$ , Tilisolol residue;

as in Bufetolol but with  $\text{R}_{\text{B}1}^{\text{IV}} = (\text{XIo})$ , Timolol residue;

as in Bufetolol but with  $S_1 = S_2 = \text{CH}_3$ , Xibenolol residue;

as in Xibenolol but with  $\text{R}_{\text{B}1}^{\text{I}} = S_1 = \text{H}$ , Toliprolol residue;

as in Toliprolol, but with  $\text{R}_{\text{B}1}^{\text{II}} = \text{H}$  and  $\text{R}_{\text{B}1}^{\text{III}} = (\text{XIa})$ , Bevantolol residue;

as in Carazolol but with  $\text{R}_{\text{B}1}^{\text{II}} = \text{H}$  and  $\text{R}_{\text{B}1}^{\text{III}} = (\text{XIb})$ , Carvedilol residue;

when in the formula (A3)  $\text{R}_{\text{B}1}^{\text{I}} = \text{R}_{\text{B}1}^{\text{II}} = \text{R}_{\text{B}1}^{\text{III}} = \text{CH}_3$ ,  $\text{R}_{\text{B}1}^{\text{V}} = (\text{XIh})$ ,  $n = m = 1$ ,  $\text{R}_{\text{B}1}^{\text{VI}} = \text{R}_{\text{B}1}^{\text{VII}} = \text{H}$ ,  $\text{X}_{\text{B}1} = -\text{O}-$ ,  $\text{R}_{\text{B}1}^{\text{IV}} = (\text{XIg})$ , Bopindolol residue;

as in Atenolol but with  $\text{R}_{\text{B}1}^{\text{IV}} = (\text{XIp}^{\text{VIII}})$ , wherein  $\text{B} = -\text{NH}-$ , Carazolol residue;

as in Bufetolol, but with  $\text{R}_{\text{B}1}^{\text{IV}} = (\text{XIp}^{\text{VII}})$  wherein  $\text{A} = -\text{CH}_2-\text{CH}_2-$ ,  $\text{B} = -\text{NH}-$ ,  $\text{W}_2 = -\text{O}$  which with  $\text{W}_1 = \text{free valence}$  and the carbon atom in 1' position forms a ketonic group, Carteolol residue;

as in Bufetolol but with  $S_3 = -\text{NH}-\text{CO}-\text{N}(\text{C}_2\text{H}_5)_2$ ,  $S_1 = -\text{CO}-\text{CH}_3$  Celiprolol residue;

as in Bufetolol but with  $S_1 = -O-CH_2-CONH-CH_3$ , Cetamolol residue;

as in Bupranolol, but with  $S_2 = Cl$  Cloranolol residue;

as in Atenolol but with  $S_3 = -CH_2-CH_2-COOCH_3$ , Esmolol residue;

as in Atenolol but with  $R^{IV}_{B1} = (Xiu)$  Indenolol residue;

as in Carteolol, but in  $R^{IV}_{B1} = (XIp^{VII})$   $A = -CH_2-$ ,  $B = -COCH_2-$ ,  $W1 = W2 = H$ , Levobunolol residue;

as in Carteolol but with  $R^I_{B1} = H$  and in  $R^{IV}_{B1} = (XIp^{VII})$   $A$  is a tertiary carbon atom and  $W1$  free valence, so as to form a  $-CH=CH-$  double bond between  $A$  and the carbon atom in 1' position of  $(XIp^{VII})$ ,  $W2 = CH_3$ , Mepindolol residue;

as in Atenolol, but with  $S_3 = -(CH_2)_2-OCH_3$ , Metoprolol residue;

as in Carteolol but in  $R^{IV}_{B1} = (XIp^{VII})$   $A = -CH_2-CH(OH)-$ ,  $B = -CH_2-$ ,  $W2 = OH$ ,  $W1 = H$ , Nadolol residue;

as in Atenolol but with  $S_3 = NO_2$ , Nifenalol residue;

as in Bufetolol but with  $R^{IV}_{B1} = (XIIt)$ , Bucumolol residue;

when in the (A3) formula  $m = n = 0$  and  $R^{IV}_{B1} = (XIz)$   $R^I_{B1} = R^{II}_{B1} = R^{III}_{B1} = CH_3$ ,  $R^V_{B1} = H$ , Bufuralol residue;

as in Atenolol but with  $R^{III}_{B1} = (XIe)$  with  $Y_{B1} = H$ ,  $n = m = 0$ ,  $R^{IV}_{B1} = (Xli)$  Butidrine residue;

as in Butidrine, but with  $R^{III}_{B1} = (XIe)$  with  $Y_{B1} = (XIf)$  with  $Z = H$ ,  $R^{IV}_{B1} = (XIp)$  wherein  $S_3 = OH$  and  $S_2 = CONH_2$ ,  $S_1 = S_4 = H$ , Dilevalol residue;

as in Bevantolol but with  $S_2 = H$ ,  $S_1 = CN$ ,  $R^{III}_{B1} = (XIc)$ , Epanolol residue;

as in Butidrine but with  $R^{III}_{B1} = CH_3$ ,  $R^{IV}_{B1} = (XIIm)$ , wherein the naphthalenic residue is linked by the carbon atom in 2 position to the carbon atom bringing the  $-OR^{IV}_{B1}$  substituent, Pronethalol residue;

as in Pronethalol but with  $m = 1$  and  $X_{B1} = -O-$ , and  $R^{IV}_{B1}$  is the naphthalenic residue (XIm) linked by the carbon atom in 1 position to  $X_{B1}$  Propranolol residue;

as in Pronethalol but with  $R^{IV}_{B1} = (XIp)$  with  $S_1 = S_2 = S_4 = H$  and  $S_3 = -NH-SO_2-CH_3$ , Sotalol residue;

as in Dilevalol but with  $S_2 = -SOCH_3$ , and in para position to the other aromatic ring (form. XI<sub>f</sub>)  $Z = -OCH_3$ , Sulfinalol residue;

when in the formula (A3)  $R^I_{B1} = R^{II}_{B1} = H$ ,  $R^{III}_{B1} = (XI_d)$  with  $t = 1$ ,  $R^V_{B1} = H$ ,  $n = m = 0$ ,  $R^{IV}_{B1} = (XI_d)$  with  $t = 0$ , Nebivolol residue;

2-hydroxy-5-[1-hydroxy-2-[(1-methyl-3-phenylpropyl)amino]ethyl] benzamide (Labetalol), 1-(4-amino-6, 7-dimethoxy-2-quinazoliny)-4-[(tetrahydro-2-furanyl)carbonyl]piperazine (Terazosin), 1-(4-amino-6,7-dimethoxy-2-quinazoliny)-4-(2-furanylcarbonyl)piperazine (Prazosin).

### 3. Nitrate salts of the following compounds of class (A4):

(A4a):

(2S-cis)-3-(acetyloxy)-5-[2-(dimethylamino)ethyl]-2,3-di-hydro -2-(4-methoxyphenyl)-1.5-benzothiazepin-4(5H)-one (Diltiazem),  $\alpha$ -[3-[[2-(3, 4-dimethoxyphenyl)ethyl]-methylamino]propyl]-3, 4-dimethoxy- $\alpha$ -(1-methylethyl)-benzeneacetonitrile (Verapamil);

(A4b):

2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-di-hydro-6-methyl-3,5-pyridinedicarboxylic acid 3-ethyl 5-methyl ester (Amlodipine), 4-(2,3-dichlorophenyl)-1,4-dihydro-2,6-dimethyl-3,5-pyridinedicarboxylic acid methyl ester (Felodipine) 4-(4-benzofurazanyl)-1, 4-dihydro-2,6-dimethyl-3,5-

pyridinedicarboxylic acid 5-methyl 3-(1-methyl)ethyl ester (Isradipine),  
 Lercanidipine, 1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3, 5-pyridine-  
 dicarboxylic acid methyl 2[methyl(phenylmethyl)amino]ethyl ester  
 (Nicardipine), 1, 4-dihydro-2,6-dimethyl-4-(2-nitro-phenyl)-3, 5-  
 pyridinedicarboxylic acid dimethyl ester (Nifedipine), 1,4-dihydro-2,6-  
 dimethyl-4-(3-nitrophenyl)-3,5-pyridinedicarboxylic acid 2-methoxyethyl 1-  
 methylethyl ester (Nimodipine), 1,4-dihydro-2,6-dimethyl-4-(2-nitro-phenyl)-  
 3,5-pyridinedicarboxylic acid methyl 2-methyl-propyl ester (Nisoldipine) 1,4-  
 dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3,5-pyridinedicarboxylic acid ethyl  
 methyl ester (Nitrendipine);

(A4c):

(E)-1-[bis(4-fluorophenyl)methyl]4-(3-phenyl -2-propenyl) piperazine  
 (Flunarizine).

4. Nitrate salts of the following compounds of class (A7):

(A7a):

6-chloro-2H-1,2,4-benzothiadiazine-7-sulphonamide 1,1-dioxide  
 (Chlorothiazide), 2-chloro-5-(2,3-dihydro-1-hydroxy-3-oxo-1H-isoindol-1-  
 yl)benzebesulphonamide (Chlortalidone), 6-chloro-3,4-dihydro-2H-1,2,4-  
 benzothiadiazine-7-sulphonamide 1,1-dioxide (Hydrochlorothiazide), 3-  
 (aminosulphonyl)-4-chloro-N-(2,3-dihydro-2-methyl-1H-indol-1-yl)benzamide  
 (Indapamide), 7-chloro-1,2,3,4-tetrahydro-2-methyl-3-(2-methylphenyl)-4-oxo-  
 6-quinazolinesulphonamide (Metolazone), 7-chloro-2-ethyl-1,2,3,4-tetra  
 hydro-4-oxo-6-quinazolinesulphonamide (Quinethazone);

(A7d):

3,5-diamino-N-(aminoiminomethyl)-6-chloropyrazinecarboxamide  
 (Amiloride), 6-phenyl-2,4,7-pteridinetriamine (Triamterene), 3-  
 (aminosulphonyl)-5-(butylamino)-4-phenoxy-benzoic acid (Bumetanide), 5-  
 (amino sulphonyl)-4-chloro-2-[(2-furanylmethyl)amino]benzoic acid  
 (Furosemide), N-[[[(1-methylethyl)amino]carbonyl]-4-[(3-methylphenyl)amino]-  
 3-pyridinesulphonamide (Torasemide);  
 (A8):

Apomorphine.

5. Nitrate salts according to claims 1-4 of the following compounds:  
 class A1b): Losartan;  
 Class A3): Atenolol, Labetalol, Timolol, Prazosin, Terazosin, Propranolol;  
 Class A4): Nicardipine, Nifedipine, Nimodipine;  
 Class A7): Chlorothiazide, Amiloride, Furosemide.
6. Salts according to claims 1-4, wherein the salts of said compounds contain at least one nitrate ion mole/compound mole.
7. Pharmaceutical compositions of the nitrate salts according to claims 1-4 and a pharmaceutically acceptable carrier.
8. A method for treating hypertension, said method comprising administering to a patient in need thereof a hypertension treating effective amount of at least one compound of claims 1-4.

9. A method for treating cardiovascular disease, said method comprising administering to a patient in need thereof a cardiovascular disease treating effective amount of at least one compound of claims 1-4.

10. A method for treating hypertension, said method comprising local administration to a patient in need thereof a hypertension treating effect amount of at least one compound of claims 1-4.